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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,555	09/30/2005	Thomas D Beimel		2308

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EXAMINER
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KOSLOW, CAROL M

ART UNIT	PAPER NUMBER
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1793

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11/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/511,555

Applicant(s)

BEIMEL, THOMAS D

Examiner

C. Melissa Koslow

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29, 32 and 34 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-17, 19-25, 27, 28, 30, 31, 33 and 35 is/are rejected.
- 7) ☒ Claim(s) 9, 18 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/372,946, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application.

The provisional application teaches microcapsules of glass encapsulated strontium aluminate and a luminous composition comprising about 15 wt% of the microcapsules, about 16 wt% hydraulic cement, about 14 wt% of polyvinyl acetate, about 45-57 wt% limestone and optionally about 7-10 wt% silica. This limited disclosure does not provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for the claims of this application.

Therefore the claimed subject matter has the effective filing date of 16 April 2003.

The foreign priority claim filed on 18 October 2004 to U.S. application 10/414,083 was not entered because the foreign priority claim was not filed during the time period set forth in 37 CFR 1.55(a)(1). For applications that have entered national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and the Regulations under the PCT. See 37 CFR 1.55(a)(1)(ii) and MPEP 1828.

This time limit is 4 months from the international filing date, which is 16 April 2003, or 16 month from the filing date of the foreign application, which is 16 August 2003.

Applicant needs to delete the reference to U.S. application 10/414,083 in the paragraph titled "--Cross-Reference To Related Applications".

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The subject matter of claims 9, 18 and 26 is not found in the specification.

Claims 28, 30, 31 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 28 and 31 are duplicate claims since the particles resulting from the process of claim 29 are those having the characteristics of claims 28. Applicant is advised that should claim 29 be found allowable, claim 31 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims 30 and 33 are indefinite since it is unclear when this heating step occurs, before or after the claimed cooling and rendering step in claims 29 and 32. The specification teaches the heating step occurs after the rendering step. Claims 30 and 33 should be amended to reflect what is taught in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28 and 31 are rejected under 35 U.S.C. 102(n) as being anticipated by applicant's admission in paragraphs 32-33.

Applicant admitted that he bought commercially available silica glass encapsulated strontium aluminate microcapsules, which have a particle that falls within the claimed range. Applicant admitted these microcapsules contain 4-8% fractured particles. Thus the claimed particle were known and on sale more than one year prior to the date of application for patent in the United States.

Claims 1, 28 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/42386.

This reference teaches cement comprising silica glass encapsulated strontium aluminate microcapsules. The microparticles have a particle size of 9-45 microns and the process on page 5 of the reference produces particles where less than 30% of the particles are fractured. The reference teaches the claimed powder and luminous composition. While the microcapsules are produced by a process different from that of claims 29, the resulting powder appears to be the same as that claimed, absent any showing to the contrary. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art,

the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claims 28 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/00748.

This reference teaches resin encapsulated strontium aluminate microcapsules. Example 1 teaches the resin can be an acrylic resin and that the resulting particles have a size of 1-70 microns, which falls within the claimed range. The reference teaches substantially all of the particles are encapsulated, which means that less than 30% of the particles are fractured. The reference teaches the claimed powder. While the microcapsules are produced by a process different from that of claims 29, the resulting powder appears to be the same as that claimed, absent any showing to the contrary. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-22, 24, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,596,074 in view of WO 01/42386.

U.S. patent 6,596,074 teaches a luminous composition comprising hydraulic cement, silica sand, a thickener, a vinyl acetate ethylene copolymer, luminous calcium aluminate and titanium dioxide, a whitener (example 6). The patent does not teach the size of the aluminate nor that it should be encapsulated. WO 01/42386 teaches the use of luminous aluminates in cements, such as those taught by the patent. WO 01/42386 teaches the conventional size of the luminous aluminate used in cement, such as that in the patent, is in the range of 9-60 microns and that these aluminates should be encapsulated in a silica glass to prevent the luminous properties of the aluminates from being degraded by the moisture used to cure the cement. Thus one of ordinary skill in the art would have found it obvious to selected calcium aluminate particles having a size in the range of 9-60 microns and to encapsulate the taught calcium aluminate particles with silica glass by the process in WO 01/42386 to prevent the performance of the aluminate from being degraded where less than the 30% of the encapsulated particles are fractured. The references suggest the claimed composition.

The above suggested composition would emit blue light, since calcium aluminates emits blue light. If one of ordinary skill in the art wished for the composition to emit a different color, one of ordinary skill in the art would have found it obvious to replace the taught encapsulated having a size of 9-60 microns calcium aluminate with any other known encapsulated alkaline earth aluminate luminous material having a size in the range of 6-90, such as the known green emitting strontium aluminate, as discussed on pages 4-5 of WO 01/42386. The references suggest the composition of claim 25.



Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,596,074 in view of WO 01/42386 as applied to claim 20 above, and further in view of WO 01/00748.

As discussed above, U.S. patent 6,596,074 in view of WO 01/42386 suggest the claimed composition where the aluminate is encapsulated with silica glass. The references do not teach using acrylic resins as an encapsulate. WO 01/00748 teaches encapsulating alkaline earth aluminates in an acrylic resin to isolate and protect the particles from the environment. Thus the acrylic resin has the same function as the taught silica glass and fluoride coatings. Accordingly, one of ordinary skill in the art would have found it obvious to use acrylic resin as the encapsulate in place the silica glass or fluoride coatings taught in WO 01/42386. The references suggest the claimed composition.

Claims 1-5, 7, 8, 10-14, 16, 17, 19 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/42386 in combination with U.S. patent 6,514,595.

WO 01/42386 teaches cements comprising the microcapsules of claims 3, 5, 7, 10, 14, 16, 17 and 19. Page 7 of this reference teaches the cement can be a settable paint for paver bricks, which are made of concrete. U.S. patent 6,514,595 teaches luminous settable paints for concrete that contains a luminescent material, hydraulic cement, polyvinyl acetate, limestone as a coarse aggregate, silicate as a fine aggregate and combinations of conventional cement admixtures, such as defoamers and retarders, or curing decelerants. One of ordinary skill in the art would have found it obvious to use the paint of U.S. patent 6,514,595 as the settable paint for paver bricks of WO 01/42386 and to use the encapsulated alkaline earth aluminate of WO

01/42386 as the luminescent particles in the composition of U.S. patent 6,514,595. The references suggest the claimed compositions.

Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/42386 in combination with U.S. patent 6,514,595 as applied to claims 2 and 11 above, and further in view of WO 01/00784.

As discussed above, WO 01/42386 in view of U.S. patent 6,514,595 suggests the claimed composition. The references do not teach using acrylic resins as an encapsulate. WO 01/00784 teaches encapsulating alkaline earth aluminates in an acrylic resin to isolate and protect the particles from the environment. Thus the acrylic resin has the same function as the taught silica glass and fluoride coatings. Accordingly, one of ordinary skill in the art would have found it obvious to use acrylic resin as the encapsulate in place the silica glass or fluoride coatings taught in WO 01/42386. The references suggest the claimed composition.

Claims 29, 32 and 34 are allowable over the cited art of record.

Claims 30 and 33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 9, 18 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The claimed method and compositions of claims 9, 18 and 26 are not taught or suggested by the cited art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cmk  
November 8, 2007

  
C. Melissa Koslow  
Primary Examiner  
Art Unit 1793